

ABSTRACT OF SANITARY REPORTS.

VOL. V.

WASHINGTON, D. C., AUGUST 15, 1890.

No. 33.

[Published at the Marine-Hospital Bureau in accordance with act of Congress of April 20, 1878.]

UNITED STATES.

SPECIAL REPORTS.

Gulf Quarantine Station—Yellow fever—Danger that it may lurk in vessels without record of sickness—Quarantine detention should date from completion of disinfection.

CHANDELEUR ISLAND, MISS., August 1, 1890.

SIR: I have to report a case of yellow fever aboard the British bark *Chippewa*, from Rio Janeiro, bound for Pensacola, here since July 15, 1890, discharging ballast, etc.

This case was brought ashore July 30, developing the night before, and is now at the Lazaretto. It is rather a bad case.

The vessel finished disinfection July 28, and he doubtless contracted the disease cleaning the hold, on the 27th, or overhauling the packed-up clothing, on the 28th.

She was a clean vessel on arrival, although somewhat old, and with more fine stuff, decomposed granite from the surface of the quarry, than I like to see, in her ballast. She is, of course, disinfected anew.

This case and the one (27th ultimo) on the *Curlew* beautifully illustrate two points:

1. The danger that may lie in vessels with no sickness upon or before arrival, the dunnage, ballast, or cargo being infected, and disease contracted only when this is disturbed. Neither vessel had any sickness in Rio, en route, or on arrival.

2. The futility of counting quarantine detention from any date save the completion of disinfection, i. e., last exposure to possible infection.

On the 68th day from Rio, the 15th from arrival in quarantine limits, this (last) case developed, and had detention been counted from either of these dates, as she (the vessel) had been disinfected, it had developed ashore.

Counting from completion of disinfection, it developed after one and a half days of quarantine.

Very respectfully, your obedient servant,

H. R. CARTER,

Passed Assistant Surgeon, U. S. M.-H. S.

Small-pox in the Rio Grande district.

The following has been received from the State health officer of Texas:

HOUSTON, TEX., August 6, 1890.

DEAR SIR: Yours of 29th ultimo to hand and noted. I am just back from a trip covering the whole Rio Grande district, and can confidently

say to you that all the current reports about small-pox are very much exaggerated. It is true that we have put quarantine rules in force at Eagle Pass against Piedras Negras. They have a good many cases in Piedras Negras, and inasmuch as they have not taken any steps to isolate patients or to prevent the spread of the disease up to this writing, quarantine will be held in force until we are satisfied the danger is past. No more cases in Camargo, and only three known on this side the river at present.

* * * * *

I remain,

R. RUTHERFORD, M. D.,
Texas State Health Officer.

NOTE.—For consular reports of small-pox at Piedras Negras see Foreign Reports, Mexico.

Reports of States, and yearly and monthly reports of cities.

CALIFORNIA—*Sacramento*.—Month of July, 1890. Population, 30,000. Total deaths, 32, including phthisis pulmonalis, 5; diphtheria, 3; and scarlet fever, 1.

COLORADO—*Denver*.—Month of July, 1890. Population, 150,000. Total deaths, 228, including phthisis pulmonalis, 24; diphtheria, 20; enteric fever, 14; membranous croup, 1; and whooping-cough, 2.

FLORIDA.—Months of May and June, 1890. A statistical report of the Florida State board of health for the months of May and June has been received, of which the following is a summary:

	May.	June.
Number of counties reported from.....	16	17
Number of places reported from.....	65	78
Number of births reported.....	161	112
Number of deaths reported.....	194	178
Number of deaths under five years reported.....	94	43

The sanitary condition of the State is reported as good.

ILLINOIS—*Galesburg*.—Month of July, 1890. Population, 17,000. Total deaths, 14, including phthisis pulmonalis 2.

INDIANA—*Evansville*.—Month of July, 1890. Population, 50,600. Total deaths, 67, including phthisis pulmonalis, 5; diphtheria, 2; scarlet fever, 1; and enteric fever, 3.

IOWA—*Dubuque*.—Month of July, 1890. Population, 40,000. Total deaths, 43, including diphtheria 1 and enteric fever 2.

Davenport.—Month of July, 1890. Population, 33,715. Total deaths, 37, including phthisis pulmonalis 2 and diphtheria 2.

KENTUCKY—*Louisville*.—Month of July, 1890. Population, 227,000. Total deaths, 138, including phthisis pulmonalis, 31; diphtheria, 5; enteric fever, 25; croup, 1; and whooping-cough, 1.

MASSACHUSETTS—Fall River.—Month of July, 1890. Population, 69,000. Total deaths, 216, including enteric fever, 2; diphtheria, 1; croup, 1; and whooping-cough, 1.

MICHIGAN.—Week ended August 2, 1890. Reports to the State board of health, Lansing, from 69 observers, indicate that typhoid fever, typho-malarial fever, cholera morbus, cholera infantum, diphtheria, dysentery, measles, and cerebro-spinal meningitis increased, and that puerperal fever, membranous croup, inflammation of brain, and scarlet fever decreased in area of prevalence.

Diphtheria was reported at 18 places, scarlet fever at 27 places, enteric fever at 20 places, and measles at 24 places.

Month of July, 1890. Compared with the preceding month, the 340 reports received indicate that cholera infantum, cholera morbus, cerebro-spinal meningitis, dysentery, whooping-cough, diarrhoea, typho-malarial fever, and inflammation of bowels increased, and that membranous croup, measles, pneumonia, and influenza decreased in prevalence.

Compared with the average for the month of July in the four years 1886-'89, membranous croup, measles, and influenza were more prevalent, and small-pox, puerperal fever, typho-malarial fever, and typhoid fever were less prevalent in July, 1890.

Including reports by regular observers and others, diphtheria was reported present in Michigan in the month of July, 1890, at 50 places, scarlet fever at 51 places, enteric fever at 29 places, and measles at 72 places.

Reports from all sources show diphtheria reported at 8 places less, scarlet fever at 3 places more, enteric fever at 1 place more, and measles at 36 places less in the month of July, 1890, than in the preceding month.

Grand Rapids.—Month of July, 1890. Population, 70,000. Total deaths, 93, including phthisis pulmonalis, 11; diphtheria, 4; and whooping-cough, 1.

MISSOURI—St. Louis.—Month of July, 1890. Population, 450,000. Total deaths, 826, including phthisis pulmonalis, 58; enteric fever, 12; scarlet fever, 6; diphtheria, 15; croup, 1; and whooping-cough, 7.

NEW YORK—Rochester.—Month of July, 1890. Population, 130,000. Total deaths, 223, including phthisis pulmonalis, 19; diphtheria, 1; scarlet fever, 1; enteric fever, 6; and whooping-cough, 2.

OHIO—Cincinnati.—Month of July, 1890. Population, 325,000. Total deaths, 616, including phthisis pulmonalis, 54; diphtheria, 19; enteric fever, 23; and measles, 1.

Dayton.—Month of July, 1890. Population, 60,000. Total deaths, 114, including phthisis pulmonalis, 10; diphtheria, 5; enteric fever, 2; and croup, 1.

RHODE ISLAND—Newport.—Month of July, 1890. Population, 20,000. Total deaths, 32, including diphtheria, 1; enteric fever, 1; and whooping-cough, 1.

TENNESSEE—Nashville.—Month of July, 1890. Population, 68,531. Total deaths, 133, including phthisis pulmonalis, 12; enteric fever, 3; measles, 1; and whooping-cough, 3.

TEXAS—San Antonio.—Month of July, 1890. Population, 50,000. Total deaths, 91, including phthisis pulmonalis 8 and enteric fever 7.

VIRGINIA—Lynchburg.—Month of July, 1890. Population, 25,000. Total deaths, 65, including 6 from enteric fever.

Publications received.

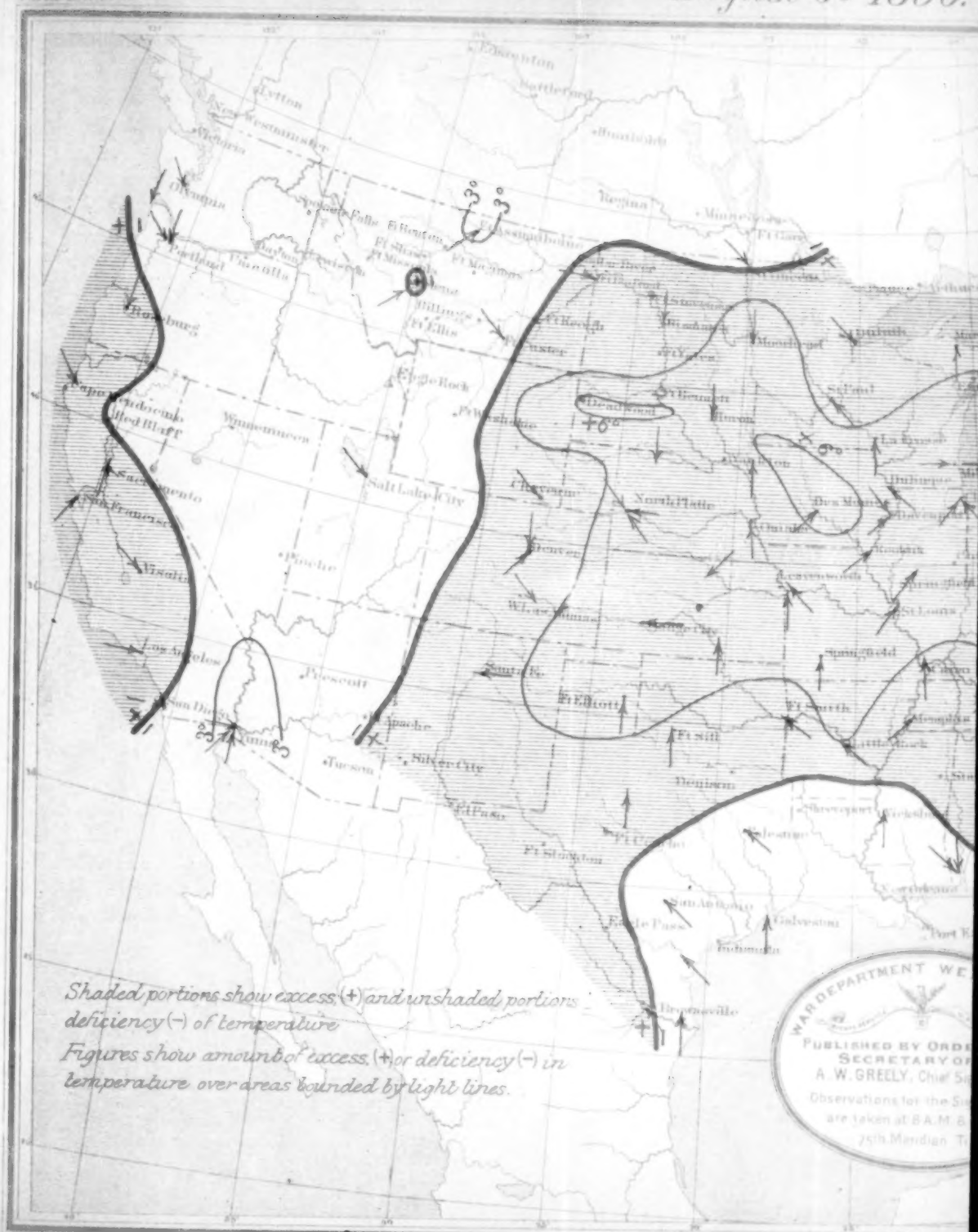
The Sanitary Inspector for May, 1890, published by the Maine State board of health.

MORTALITY TABLE, CITIES OF THE UNITED STATES.

Cities.	Week ended.	Estimated population.	Total deaths from all causes.	Deaths from—										
				Cholera.	Yellow fever.	Small-pox.	Variceloid.	Varicella.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping-cough.
New York, N. Y.	Aug. 9	1,636,598	815							8	4	12	10	13
Chicago, Ill.	Aug. 9	1,200,000	597							32	2	14	2	8
Philadelphia, Pa.	Aug. 2	1,064,277	414							13	1	7		11
Brooklyn, N. Y.	Aug. 2	871,852	475							7	4	18	1	11
Baltimore, Md.	Aug. 9	500,343	208							11		5		1
St. Louis, Mo.	Aug. 2	450,000	163							4	2	6		
St. Louis, Mo.	Aug. 9	450,000	192							5	2	2		
Boston, Mass.	Aug. 9	437,245	278							3	1	3	2	
Cincinnati, Ohio.	Aug. 8	325,000	111							12		2		1
Washington, D. C.	Aug. 9	250,000	102							6		2		
Milwaukee, Wis.	Aug. 9	240,000	81									4	4	1
Pittsburgh, Pa.	Aug. 9	240,000	128							11		4	2	
Detroit, Mich.	Aug. 2	230,000	108							1		8		
Minneapolis, Minn.	Aug. 9	200,000	68							1		6		
Louisville, Ky.	Aug. 9	190,000	63							9	1	2		
Kansas City, Mo.	Aug. 2	150,000	40								1	1		2
Rochester, N. Y.	Aug. 9	130,000	66											
Providence, R. I.	Aug. 9	130,000	80									2		
Indianapolis, Ind.	Aug. 8	129,343	39							4	1			
Richmond, Va.	Aug. 9	100,000	43							2	1			1
Toledo, Ohio.	Aug. 8	81,650	34											
Nashville, Tenn.	Aug. 9	80,000	34							3				
Fall River, Mass.	Aug. 9	69,000	46											
Charleston, S. C.	Aug. 9	60,145	29							2				
Manchester, N. H.	Aug. 9	44,000												
Portland, Me.	Aug. 9	42,000	16											1
Galveston, Tex.	July 25	40,000	6							1				
Galveston, Tex.	Aug. 1	40,000	6											
Yonkers, N. Y.	Aug. 8	32,000	13											
Auburn, N. Y.	Aug. 2	26,000	10											
Auburn, N. Y.	Aug. 9	26,000	13											
Newton, Mass.	Aug. 9	22,011	9											
Newport, R. I.	Aug. 7	19,566	14											1
Rock Island, Ill.	Aug. 3	16,000	8											
Pensacola, Fla.	Aug. 2	15,000	5							1				

Temperature and Prevailing Direction of August 8th 1890.

Form 106 P.

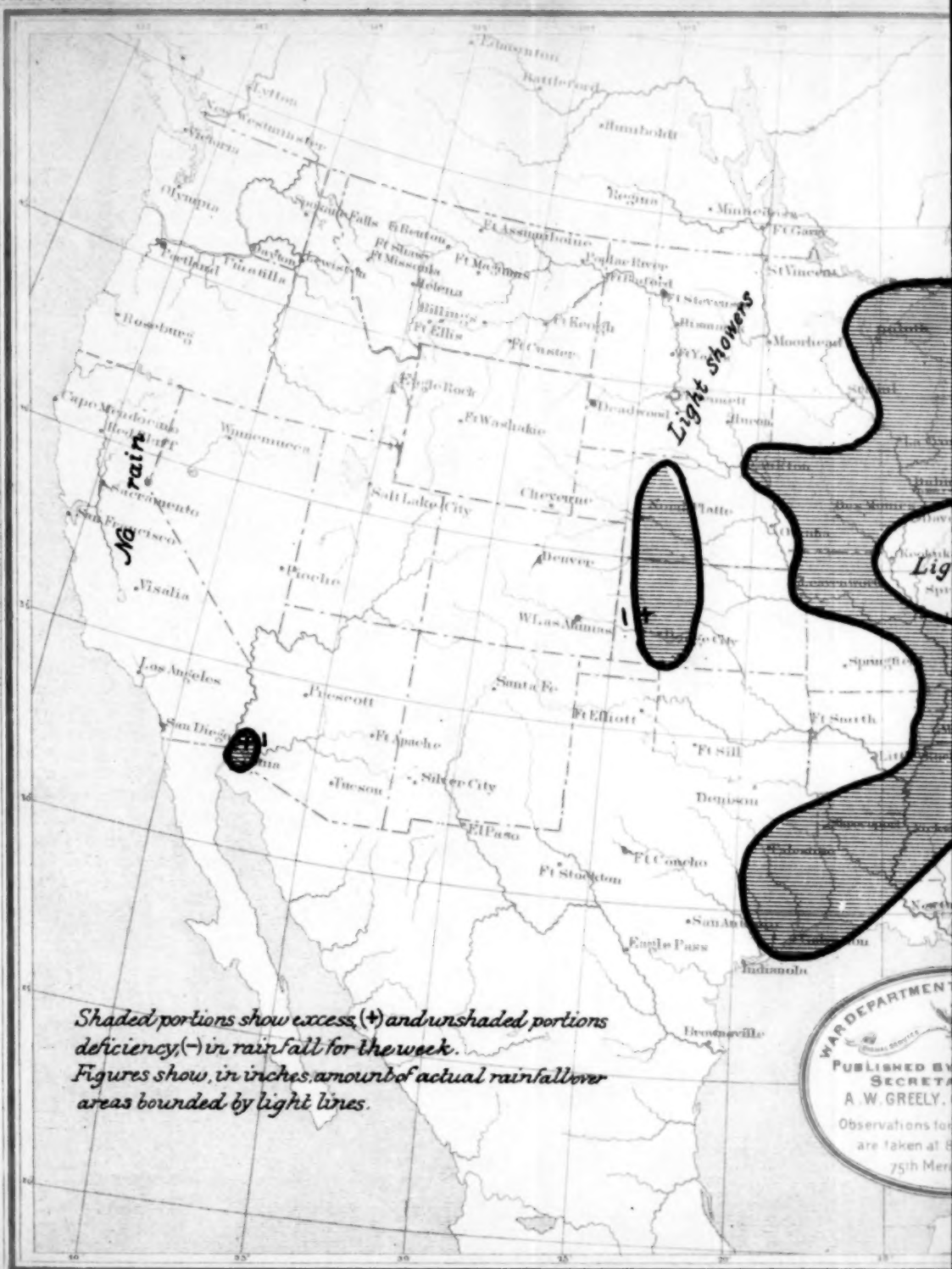


Direction of Wind, week ending 1890.



Rainfall, week ending Aug

Form 1146 F



g August 8th 1890.



DEPARTMENT WEATHER MAP
PUBLISHED BY ORDER OF THE
SECRETARY OF WAR.
A. W. GREELY, Chief Signal Officer
Observations for the Signal Service
are taken at 8 A.M. & 8 P.M.
75th Meridian Time

Temperature and precipitation, week ended August 9, 1890.

[Received from the Signal Office, War Department.]

TEMPERATURE.

The week ending August 9 has been warm, except on the south Atlantic and Gulf coasts and over the plateau regions. The excess of temperature was very slight in the northern portions of the Gulf States, while the daily excess ranged from 3° to 6° throughout the Northern States, the week being warmest in the interior of New York and Pennsylvania, and in Iowa and southern Dakota, where the daily excess above the normal exceeded 6° .

The thermal excess for the season, from January 1 to August 9, amounts to about 2° per day over the southern and middle Atlantic States, the lower lake region, and the Ohio valley. The seasonal temperature has been slightly in excess generally throughout the Northwest, but there is a slight deficiency over the region west of the Rocky Mountains.

PRECIPITATION.

The rain-fall for the week has been in excess generally throughout the regions east of the Mississippi, except in New England, the southern portions of the south Atlantic and east Gulf States, and in portions of Indiana, Illinois, Ohio, and Kentucky. Very light showers occurred in New England, and local rains are reported from Texas northward to the Dakotas, the rain-fall being in excess in the western portions of Kansas and Nebraska. Very heavy local rains occurred in the northern portions of the Gulf and south Atlantic States, the precipitation in this section ranging from two to four inches.

The season continues dry over Kansas, southern Nebraska, northwestern Missouri, and southwestern Iowa, where there is a deficiency of from seven to nine inches in the seasonal rain-fall, or only from one-half to three-fourths of the normal rain-fall reported. On the south Atlantic and Gulf coasts and on the southeast New England coast the seasonal rain-fall has been less than 75 per cent. of the normal, while in the Dakotas and Minnesota it generally exceeds 80 per cent. The rain-fall has been in excess in the lower Mississippi and the Ohio valleys, and throughout the lake regions and the northern portions of the middle Atlantic States.

The seasonal rain-falls are also in excess on the Pacific coast, except in the extreme southern portion of California.

FOREIGN.

(Reports received through the Department of State and other channels.)

GREAT BRITAIN—*England and Wales.*—The deaths registered in 28 great towns of England and Wales during the week ended July 26 corresponded to an annual rate of 17.6 a thousand of the aggregate population, which is estimated at 9,715,559. The lowest rate was recorded in Portsmouth, viz, 11.7, and the highest in Newcastle-upon-Tyne, viz, 24.6 a thousand. Diphtheria caused 4 deaths in Salford, 2 in Manchester, 2 in Liverpool, 3 in Newcastle-upon-Tyne, and 2 in Portsmouth.

London.—One thousand four hundred and eighteen deaths were registered during the week, including measles, 94; scarlet fever, 13; diphtheria, 20; whooping-cough, 62; enteric fever, 2; and diarrhoea and dysentery, 107. The deaths from all causes corresponded to an annual rate of 16.7 a thousand. Diseases of the respiratory organs caused 185 deaths. In greater London 1,746 deaths were registered, corresponding to an annual rate of 15.8 a thousand of the population. In the "outer ring" the deaths included measles, 18; whooping-cough, 11; and diphtheria, 6.

Ireland.—The average annual death rate, represented by the deaths registered during the week ended July 26, in the 16 principal town districts of Ireland, was 18.8 a thousand of the population. The lowest rate was recorded in Sligo, viz, 0.0, and the highest in Galway, viz, 26.9 a thousand. In Dublin and suburbs 140 deaths were registered, including measles, 2; influenza, 1; and whooping-cough, 4.

Scotland.—The deaths registered in eight principal towns during the week ended July 26 corresponded to an annual rate of 21.1 a thousand of the population, which is estimated at 1,345,563. The lowest mortality was recorded in Leith, viz, 10.6, and the highest in Glasgow, viz, 23.5 a thousand. The aggregate number of deaths registered from all causes was 545, including measles, 25; scarlet fever, 3; diphtheria, 4; whooping-cough, 36; fever, 7; diarrhoea, 14; and croup and laryngitis, 6.

Malta and Gozo.—One hundred and ninety-three deaths were registered during the period from the 1st to the 15th of July, 1890. No deaths are reported from contagious diseases.

FRANCE—*Nantes.*—Month of June, 1890. Population, 127,482. Total deaths, 209, including phthisis pulmonalis, 31; enteric fever, 24; diphtheria, 7; and typhus fever, 2.

SPAIN—*Cholera.*—The United States consul at Barcelona, under date

of July 25, 1890, transmits a continuation of his daily report of cholera in the province of Valencia, as follows:

July 15 in—

	Cases.	Deaths.
Benaguacil.....	1	0
Castellon de Rugat.....	6	2
Daimez.....	0	1
Gandia.....	3	3
Yativa.....	0	1
Millares.....	6	2
Sueca.....	1	0
Enova.....	1	0

July 16—

Beniopa.....	1	1
Cullera.....	2	0
Castellon de Rugat.....	4	4
Enova.....	2	0
Gandia.....	2	7
Yativa.....	1	0
Montichelvo.....	2	0
Sueca.....	1	0

July 17—

Alcira.....	3	0
Beniopa.....	1	0
Cullera.....	1	1
Castellon de Rugat.....	6	2
Gandia.....	2	5
Yativa.....	0	1
Geronimo.....	0	1
Terrateig.....	7	0

July 18—

Alcantara.....	1	1
Beniopa.....	1	0
Cullera.....	1	1
Castellon de Rugat.....	5	1
Gandia.....	1	2
Yativa.....	4	0
Millares.....	17	4
Sueca.....	1	1
Alfarrasi.....	1	1

July 19—

Beniopa.....	1	1
Castellon de Rugat.....	3	3
Gandia.....	1	1
Yativa.....	2	1
Millares.....	9	3
Sueca.....	1	0
Terrateig.....	1	1

July 20—

Alfarrasi.....	2	1
Alcira.....	0	1
Castellon de Rugat.....	3	1
Enova.....	1	1
Gandia.....	1	1
Yativa.....	1	0
Millares.....	12	2
Terrateig.....	3	3
Guadasequia.....	2	1

July 21—

	Cases.	Deaths.
Alfarrasi.....	2	1
Beniganim.....	1	1
Cuatretonda.....	1	0
Castellon de Rugat.....	2	1
Gandia.....	0	1
Yativa.....	1	2
Millares.....	4	2
Terrateig.....	3	2
Alberique.....	1	1
Guadasequia.....	0	1

July 22—

Ayelo de Rugat.....	2	0
Beniopa.....	1	0
Castellon de Rugat.....	1	0
Yativa.....	2	2
Montichelvo.....	1	0
Millares.....	6	2
Sueca.....	1	0
Terrateig.....	1	0
Algernesl.....	2	1

From July 15 to July 22, inclusive, there were 15 cases and 8 deaths in the city of Valencia.

SWITZERLAND—*Lucerne*.—Month of July, 1890. Population, 21,400. Total deaths, 23, including 1 from whooping-cough.

ITALY—*Florence*.—Month of June, 1890. Population, 181,391. Total deaths, 307, including enteric fever, 9; scarlet fever, 1; and diphtheria, 1.

MEXICO—*Small-pox*.—The following letters have been received from the United States consul at Piedras Negras:

JULY 25, 1890.

SIR: I have the honor to inform the Department that the Texas State quarantine officer stationed at Eagle Pass, Tex., has declared a full and close quarantine against Piedras Negras, Mexico.

This quarantine began at midnight on July 24, 1890.

I have no official information as to reasons for this rigid quarantine imposed with but six hours' notice, but assume this grave action on the part of the State quarantine officer is based upon the prevalence of small-pox at Piedras Negras.

The small-pox appeared here five weeks ago, and the local authorities at once inaugurated prompt measures to check the spread of the disease.

From the most reliable information obtainable the number of cases has steadily decreased for the past two weeks.

Between the establishment of the quarantine and the date of this letter there was no increase of cases of small-pox. This quarantine does not interrupt the through trains of the Mexican International Railroad, but does completely stop all communication between the towns of Eagle Pass, Tex., and Piedras Negras, Mexico.

JULY 27, 1890.

SIR: I have the honor to report that since my last report there has been a steady decrease of small-pox at Piedras Negras. On Saturday, July 26, I personally inspected the entire town, and by actual count found ten houses with yellow flags displayed. The total number of cases is 32, of which 6 are serious and 26 convalescent. The authorities are exacting complete isolation, and the disease is rapidly disappearing. At midnight of July 24 the State quarantine officer at Eagle Pass, Tex., declared a close quarantine against Piedras Negras, Mexico. Although, on July 22, he stated that there were but 6 cases at Piedras Negras, and that the local authorities were employing every precaution to check disease.

Three weeks ago sufficient reasons could have been urged for establishing a quarantine, but from direct personal knowledge of the present situation I do not think the imposition of the present quarantine is warranted. A strong effort on the part of Eagle Pass citizens is being made to have the quarantine raised.

AUGUST 3, 1890.

SIR: Since my last report on July 27 there have been but two new cases of small-pox in this town, according to reliable official information. On August 1 there were 28 cases in all. As most of these are rapidly convalescing, we may soon expect a marked decrease in the number of cases. Mortality has been very small. I shall endeavor to procure exact data for later reports. Quarantine at Eagle Pass continues and probably will for some weeks until the last chance of infection from the last small-pox case shall have passed.

CENTRAL AMERICA—*Honduras—Denial of reported epidemic.*—The United States vice-consul at Tegucigalpa, Honduras, through the Department of State, sends the following, dated July 13, 1890:

SIR: I inclose a letter with a clipping from a Pittsburgh newspaper, which was received this morning at this consulate, and beg to state that we have no yellow fever in this Republic.

I am in weekly communication with the consular agents at Puerto Cortez and Amapala, and no yellow fever or any other malignant disease has been reported to this office.

[Inclosure.]

TEGUCIGALPA, HONDURAS, July 12, 1890.

SIR: I inclose herewith a clipping from a Pittsburgh newspaper, which has been widely spread by being copied in other publications, giving a highly-sensational and false account of an epidemic disease said to be prevalent in Central America.

The only foundation for this report is that there have been a few cases of yellow fever, or some disease analogous to it, in Belize, British Honduras, but so far as the Republic of Honduras, or, as it is sometimes called, Spanish Honduras, is concerned, the public health has never been better than at present, and there does not exist the least fear of

any epidemic or contagious disease of any kind. It is also untrue that any one is leaving the country from any such cause.

On the part of the American citizens engaged in business enterprises in Honduras, I beg that you will represent these facts to the Department of State in Washington, and respectfully request that the Secretary will give this contradiction the widest possible publicity through the press, as the above-named false report is exercising a very damaging influence on our business interests.

Respectfully,

F. F. HILDER.

GEORGE BERNHARD, Esq.,
United States Consul, Tegucigalpa.

COSTA RICA—*Yellow fever*.—The Department of State transmits the following telegram from the United States consul at San José, Costa Rica, dated August 6, 1890:

Positively no yellow fever in Limon. Government and commerce of Costa Rica request removal of quarantine at New Orleans.

WEST INDIES—*Trinidad*.—Population, 40,000. For the period from March 29 to June 28, 1890, 420 deaths were reported, none of which was from contagious diseases. The prevailing diseases were phthisis pulmonalis, measles, fevers, diarrhœa, and dysentery.

CUBA—*Santiago de Cuba*.—Period from July 1, to July 15, 1890. Total deaths, 41; including phthisis pulmonalis, 6; small-pox, 1; and croup, 1.

VENEZUELA—*Puerto Cabello*.—Week ended July 19, 1890. The United States consul reports, under date of July 19, 1890, that good health prevails in this port and the adjacent country, without any suspicion of contagious disease.

BRAZIL—*Pernambuco*—*Epidemic of small-pox*.—The weekly reports of the United States consul, dated July 3 and 10, 1890, declare small-pox epidemic in Pernambuco. During the period from June 23 to July 8, 1890, there were 171 deaths reported.

Ceara.—Month of July, 1890. Population, 33,000. Total deaths, 116; including yellow fever 3 and beri-beri 4.

Dengue fever transmitted to certain animals.

[Translated for this Bureau from *La Revue Médico-Pharmaceutique*, Constantinople, May 31, 1890.]

At a meeting of the Imperial Society of Medicine at Constantinople, November 1, 1889, the writer, Doctor Apéry, stated that he had recognized dengue fever in the epidemic form among domestic animals. The characteristic and almost constant symptoms observed by him were general malaise, failure of appetite, vomiting, paresis of the posterior limbs, and in most cases extreme debility. This condition lasted from

twenty-four hours to three days, and was simultaneous with the appearance of dengue fever among members of the household.

Dr. H. de Brun, in his remarkable work on the red fever in Syria in 1889, stated this fact, but without the corroboration of personal observation. The communication of dengue fever to animals was noted by Cubillas in 1784 during the epidemic at Cadiz. A similar observation was recently made in New Caledonia, as stated by Doctor de Brun. The present writer's own observations during the late epidemic of dengue fever at Constantinople prove beyond a doubt that the disease, prevalent among dogs and cats simultaneously with dengue fever, was identically the same disease communicated from men to animals and *vice versa*.

In his last article on dengue fever, published in the *Revue de Médecine*, Paris, November 20, 1889, Doctor de Brun described minutely four marked cases which amply demonstrate the communication of dengue fever to animals. The analogy of symptoms, the coincidence of the disease with epidemics of dengue, and the fact that it always occurred simultaneously with the outbreak of dengue fever among the members of the household, clearly indicate that the disease was communicated to the animals in question from the human beings in their vicinity.

Almost contemporaneously with Doctor de Brun's communication Doctor Leone, of Smyrna, published a statement calling attention to a peculiar disease for some time prevalent among domestic animals which he recognized as dengue. The following is his description of the symptoms of the disease:

"The animal, dog or cat, loses appetite at first, and ends by refusing food. Vomiting is quite frequent, and the secretion of saliva is sometimes excessive. General shivering is a symptom of the onset of the disease, and is probably due to cold, as the animal seems to seek warmth. In a few days it has fits of groaning, with intervals of quiet, and finally it darts about the room uttering plaintive cries and shaking its paws as if in the effort to free itself from the pain of which its limbs are the seat. That these pains are of medullary origin and are analogous to those which attack the human muscular system is evident, for the animal is at last seized with a partial paralysis, which finally becomes complete. This paralytic phase lasts several days, at the end of which time the animal succumbs or recovers its health. Convalescence is long, and the animal is slow to regain its appetite and its muscular strength."

These statements leave no room to doubt that dengue fever attacks domestic animals, and it may be remembered that great epidemics and pandemics, as, for example, influenza, have frequently been preceded by epizootic diseases strongly resembling them in character.

The writer's conclusions from the facts and observations cited are:

1. That dengue fever prevailing in an epidemic form in a given locality may attack animals equally with men.
2. That it is propagated from men to animals and *vice versa*.
3. That inoculations practiced on animals might furnish valuable results.
4. That science should take account of every communication based on the careful observation of facts.

MORTALITY TABLE, FOREIGN CITIES.

Cities.	Week ended.	Estimated population.	Total deaths from all causes.	Deaths from—							
				Cholera.	Yellow fever.	Small-pox.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.
Paris	July 26	2,260,945	890					13	3	28	46
Liverpool	July 19	613,463	228				1	2	15	5	
Brussels	July 19	477,398	178			1		3			
Warsaw	July 19	455,852	241			15			6	15	
Rio de Janeiro	July 5	450,000	279		10	2	7	5			
Rio de Janeiro	July 12	450,000	274		8	3	7	5			
Calcutta	June 21	433,219	152	6		2					
Rome	June 21	418,217	160					2		1	
Amsterdam	July 19	406,402									
Lyons	July 19	401,930	140					3			
Copenhagen	July 19	312,387	123						1	7	
Odessa	July 19	276,300	175						2		3
Dresden	July 19	269,000	102							2	
Palermo	July 21	250,000	113				2	2			
Palermo	July 28	250,000	109								
Antwerp	July 26	232,418	66					1	1		
Rotterdam	July 26	203,472	64								
Havana	Aug. 2	200,000	211	16							
Genoa	July 26	180,394	74		3	1				2	
Frankfort-on-the-Main	July 26	170,733	67						1	6	
Newcastle-upon-Tyne	July 19	162,987	78							1	
Ghent	July 26	152,305	69					1	3	1	1
Christiana	July 19	143,200	43						1	2	
Sunderland	July 19	136,506	47						2		
Funchal	July 19	133,250	19		2						
Pernambuco	June 30	120,000	151		96						
Pernambuco	July 8	120,000	176		1	85	1	1			
Cardiff	July 26	117,012	42						2		
Barmen	July 19	113,000	41				1			1	1
Crefeld	July 19	108,000	42								
Crefeld	July 26	108,000	45				6			2	
Leghorn	July 27	103,723								1	
Gothenburg	July 19	102,782	23						2		
Zurich	July 19	91,323	13				4				2
Messina	July 26	79,971	51					1		2	
Angers	July 13	78,790							1		
Jerez de la Frontera	July 5	61,708	32								
Jerez de la Frontera	July 12	61,708	34			1	1	1			
Jerez de la Frontera	July 19	61,708	35					1			
Trapani	July 19	43,065	13								
Trapani	July 26	43,065	11								
Marsala	July 19	40,131	26				1	1			
Marsala	July 26	40,131	22								
Amherstburg	Aug. 5	30,000	6								
New Castle, N. B.	July 26	23,000	7								
Schiedam	July 27	25,000	8								
Curacao	July 26	25,000	6								
Gibraltar	July 20	23,681	9								
Gibraltar	July 27	23,681	7								
Girgenti	July 19	23,547	10								
Girgenti	July 26	23,547	10							1	
Kingston, Can.	Aug. 1	18,284	2								
Matamoras	July 26	16,000	12			2					2
Matamoras	Aug. 2	16,000	5								
Hamilton, Bermuda	July 29	15,743	2								
St. Thomas, W. I.	July 5	15,000	48								
St. Thomas, W. I.	July 12	15,000	39								
St. Thomas, W. I.	July 19	15,000	35								
Flushing	July 26	12,793	8								
Denia	July 27	12,000	25	17							
Guelph	Aug. 2	10,173	2							1	
Moncton, N. B.	Aug. 2	9,000	3								
Chatham, Ont.	July 26	8,730	2								
La Guayra	July 19	7,428	6								
La Guayra	July 26	7,428	5								
Barnia	July 26	6,200	2								
Turk's Island, W. I.	July 16	5,000	4								
Turk's Island, W. I.	July 23	5,000	7								
Clifton, Ont.	Aug. 2	3,500	1								
San Juan del Norte	June 29	870	1								
San Juan del Norte	July 6	870									

JOHN B. HAMILTON,

Supervising Surgeon-General, Marine-Hospital Service.